

# The Technology Review

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## A GREAT HEGIRA TO PITTSBURGH

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Large crowds will attend the third meeting of the Technology Clubs February 19-20—Some novel features are in preparation

As preparations progress for the third annual meeting of the Technology Clubs Associated, it becomes evident that this new feature in Technology social life is becoming very popular, as men all over the country are looking forward to it and arranging to go if they can possibly do so.

The program for the two days' entertainment has been carefully prepared, and is announced on another page. The keynote of the whole affair will be simplicity and sociability. It will differ from the former meetings in that members are urged to bring their wives, and arrangements have been made so that the ladies will feel that they are as much a part of the program as their husbands.

That the general objects of the meeting will be accomplished cannot be doubted when it is known that every member of the Pittsburgh organization is an active member of some committee, and, as there are about 125 men in that district, it goes without saying that every last little detail will be looked out for with greatest care.

Another element that is working toward the success of the convention is the neighborly spirit of the local associations within striking distance. Pittsburgh is favorably located in this respect as it is in the midst of a group of active, interested clubs that will send a large proportion of their mem-

bers. These clubs are arranging to have their delegates go in a body, and Pittsburgh is arranging to have reception committees meet the trains and escort the delegates to headquarters.

Arrangements are being made for two unusually interesting exhibits. One is an exhibit of the architectural department, and the other is an exhibit made by the Institute Committee showing the scheme of organization of the students, with an organization chart showing the relations of the Institute Committee to the student body and the various activities.

As was announced by the secretary of the clubs in the January REVIEW, one important characteristic of the meeting will be to make it of concrete value to the Institute by giving an opportunity for open discussion at the course luncheons. This will be a unique feature of the convention and former students are invited to freely express their views in regard to additions or modifications of the curriculum. This discussion is to be of a constructive nature, and will include suggestions as to how the Institute can interest its students in public affairs so that after graduation they may have a strong influence on the side of good citizenship.

Please bear in mind that few cities in the country could afford a greater variety

# technology review

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# THE THIRD ANNUAL CONVENTION

## TECHNOLOGY CLUBS ASSOCIATED

PITTSBURGH, FEBRUARY 19-20, 1915

*Official Headquarters: Hotel Schenley, Grant Boulevard and Forbes Street*

### PROGRAM

FRIDAY, FEBRUARY 19

- 9.00 a. m. to 12.00 m. Registration and informal reception at headquarters, the Hotel Schenley.  
Be sure to register as a trophy will be presented to the individual coming from the greatest distance to attend the reunion.  
Registration facilities will be provided for the ladies.
- 12.30 p. m. Class luncheons at Hotel Schenley or at clubs in the immediate vicinity. Tickets \$1.00 each.
- 2.00 p. m. Excursions: These will be made in small parties with competent guides and the committee having the excursions in charge will arrange them so that in case of conflict it will be possible to make any given trip on either Friday afternoon or Saturday morning.  
A complete list of the excursions in which a number have indicated their interest will be posted at the Registration Bureau. In addition to this, the committee will endeavor to make all the necessary arrangements and furnish a guide for any of the visitors wishing to visit points not on this list.  
At many of the points of interest arrangements will be made to entertain the ladies who care to accompany their escorts on excursions.  
In the late afternoon tea will be served for the ladies at the Hotel Schenley or one of the nearby clubs.
- 8.30 p. m. Smoker at the University Club, given by the members of the Pittsburgh Association in honor of visiting alumni. This smoker will be entirely informal in character and as the reunion will be in full swing by that time, it is expected to be an occasion of general merriment and jollification. The smoker will be preceded by a brief business meeting of the Technology Clubs Associated, at which officers for the ensuing year will be elected and the place of the next meeting will be chosen.  
Through the courtesy of Director Hammerschlag of the Carnegie Institute of Technology, the ladies will be entertained on this evening in the theatre of the Institute.

## SATURDAY, FEBRUARY 20

- 9.00 a. m. to 12.00 a. m. The excursion program will be continued as on Friday afternoon.
- 12.30 p. m. Course Luncheons: These will be served in six groups at or near headquarters. Tickets \$1.00.  
At each of these luncheons constructive comment and criticism of the educational work of the Institute will be offered by various alumni and a representative of the Institute instructing staff, in most cases the head of the department concerned, will be present to take part in the discussion.  
Early returns indicate a great amount of interest in this event which is a novel one for Technology gatherings.  
Saturday afternoon, tea will be served for the ladies through the courtesy of Chancellor McCormick in one of the buildings of the University of Pittsburgh.
- 7.00 p. m. Annual Banquet of the Technology Clubs Associated at the Hotel Schenley. Tickets, \$3.00 per plate.  
The ladies are cordially invited to attend the banquet with their escorts. The older practice of providing special tables for the ladies will not be followed.  
The speakers will be President Maclaurin of the Institute, President Lowell of Harvard, President Horn of the M. I. T. Alumni Association and others.  
In the course of the banquet, stereopticon views of the new buildings as they appear within one week of the reunion will be shown. The trophies for the class having the largest attendance at the reunion and for the individual coming the longest distance, will be presented at this time.

Mr. H. A. Rapelye, '08, Oliver Building, Pittsburgh, Secretary of the General Reunion Committee, will be glad to answer any letters addressed to him requesting further information regarding the meeting. It is suggested that those planning to attend the reunion make reservations at the Hotel Schenley at the earliest possible date. Anyone preferring to stay at one of the clubs in Pittsburgh should promptly notify the Secretary to that effect.

## GENERAL REUNION COMMITTEE

W. E. MOTT, '89	T. H. BAKEWELL, '75	A. B. HARLOW, '79
W. H. REA, '79	D. S. BISSELL, '81	GEO. FAUNCE, '82
C. S. ROBINSON, '84	W. B. BLAKE, '87	W. C. CUSHING, '87
J. O. HANDY, '88	A. B. BELLOWES, '89	FRED CRABTREE, '89
W. C. FOWNES, JR., '89	F. A. McDONALD, '90	E. B. RAYMOND, '90
S. B. ELY, '92	H. M. PHILIPS, '92	A. J. PIERCE, '92
H. D. SHUTE, '92	E. D. BARRY, '95	L. K. YODER, '95
C. H. YOUNG, '96	W. E. REED, '97	F. L. BISHOP, '98
W. I. BICKFORD, '01	W. F. DAVIDSON, '01	



of entertainment to those who desire information in regard to manufacturing processes. The committee on excursions has studied the matter carefully, and upon receipt of the yellow slips, which were sent to every Tech man with the first notices, will properly arrange for the various parties.

The delegation from Boston will leave on the one o'clock train Thursday, February 18, arriving in New York a little after six. The Technology Club of New York is making preparations to have a special dinner with a large crowd of Tech men to welcome the Boston visitors, and there will be plenty of time to fraternize at the club after dinner. The New York and Boston delegations will take the 11.30 train on the Pennsylvania Road for Pittsburgh, arriving at Pittsburgh at 9.30 Friday morning. Boston men who cannot arrange to take the one o'clock train will go to New York on the five o'clock train and take the same train for Pittsburgh.

Please remember that men who intend to take the trip should write to Walter Humphreys, secretary of the Technology Clubs Associated, 491 Boylston Street, Boston, so that reservations can be made on the proper trains to New York and from New York to Pittsburgh.

### Northwestern Association Election

Election of officers of the Northwestern Association, Chicago, Illinois, was held on January 12, at the Electric Club, after which luncheon was served for the members of the association.

The new officers are: President, Kenneth Lockett, '02; vice-president, H. M. Montgomery, S. M. A., '79; secretary-treasurer, George B. Jones, '05; directors, P. W. Moore, '01; J. M. Frank, '07; H. S. Pardee, '09.

The executive committee elected is composed of nine past presidents of the association who will act in an advisory capacity.

An important enterprise that was recently started in Chicago, the Inter-collegiate Club, was opened Monday January 18. Its purpose is to bring

college men together for luncheon under one roof and in one room so that a fraternal spirit among the local alumni may be fostered.

College men meet every noon on Floor B, New Morrison Hotel, Clark and Madison streets, where an excellent luncheon is served. There are three table d'hôte luncheons, 35c, 45c, and 55c.

The arrangement is practically that of a club, although there are no dues. It is under the auspices of the Alumni Secretaries Association, which has appointed a committee of four, George B. Jones, '05, secretary of the Northwestern Association being a member.

The attendance at the luncheons, already held, averages about two hundred a day. All the colleges that have weekly luncheons are holding them now at Hotel Morrison, the new headquarters of the Northwestern Association.

### Lunch Meeting in Bridgeport

On Saturday noon, January 30, a number of the members of the Technology Club of Bridgeport took luncheon at the University Club and met I. W. Litchfield, '85, field manager of the Alumni Association, who told them of matters of interest connected with the Institute.

The Bridgeport club, which was formed last year, is a very live organization, and, although the number of men in the vicinity is not very large, their meetings are well attended and of great interest.

### Harvard Engineers Dine

The officers and about thirty Tech men of the New York Club were invited to attend a meeting of the Harvard Engineering Society of New York City, held at the Harvard Club, January 16. The speakers of the evening were President Lowell of Harvard, President Maclaurin of the Institute, Professor Hughes of Harvard, and Jasper Whiting, '89, of the M. I. T. Alumni Association. Mr. Crimmins of the Harvard Engineering Society presided.

## Annual New York Dinner

The annual dinner of the Technology Club of New York was far different from any that have preceded it. It was the first time that the affair has been given in the club house, and if the verdict of those present is followed, it will never again be given anywhere else.

The special committee of the club, under F. C. Schmitz, '95, had made every possible preparation for as large a crowd as might come. They had not only arranged to sit the maximum number in the dining room and reception room, but had housed in the summer pavilion with heavy canvas, prepared for its brilliant illumination and also had run out temporary steam pipes to large radiators so that even in the very coldest of weather the place could be made comfortable. As the number present was something less than two hundred, these additional facilities were not required.

All the afternoon guests were arriving, many of them from points in Connecticut, New York and New Jersey, and a reception committee of the club made them more than welcome.

How the excellent dinner provided by the club could be prepared with the club facilities was a marvel to the men present. The dinner was served hot and quickly and was a great credit to the managers.

Contrary to the usual custom there were no speeches, except a brief talk by Henry J. Horn, '88, the new president of the Alumni Association, and the delightful monologue by Alexander R. McKim, '85, the father of the club, who is probably more welcome than any other man that came inside its doors.

From the minute the guests sat down there was a buzz of conversation and a series of class cheers, until at the end of the dinner the president introduced Mr. Horn who made a strong plea for the attendance at the meeting of the Technology Clubs Associated at Pittsburgh, February 19 and 20.

After the dinner the rooms were quickly cleared of tables, and an excellent vaudeville entertainment was presented.

The feature of the evening was the fraternizing of Tech men, many of whom had not met each other for a long time; and while a good audience enjoyed the entertainment, the other rooms were filled with groups of classmates exchanging experiences.

The sleeping accommodations of the club were taxed beyond their limit, but the Columbia Club, always ready to extend its hospitality, took care of those who could not find a place next door.

The storm center of the late evening was the newly decorated Stein Room. Most of the men saw for the first time the new panel painted by Isaac B. Hazleton, '97, which is most striking and unconventional. The artist's conception of the relation of science to art has produced a picture of striking subtlety which is bound to have a wide reputation.



New cut of the Beaver used by Bursar Ford on the Menu Cards at Union Dining Room.

## Send in Your Card

If you haven't already filled out and returned the reply slip sent by the committee on the Pittsburgh reunion, do so at once, as it will be of great help to the committee in arranging for the various functions, especially for the excursions about Pittsburgh.

## Tech Meeting in Washington

The first meeting of the Washington Society for the new year was held at the Home Club, 14 Jackson Place, Washington, D. C., on the evening of January 20, nineteen members being present. It was the first meeting held since last March, but a large revival of interest is expected from now on.

The annual election of officers was held at this meeting, which resulted in the election of O. C. Merrill, '05, president; H. S. Bailey, '06, vice-president; Henry G. A. Black, '10, secretary; F. Charles Starr, '05, treasurer. The above with Dr. E. B. Phelps, '99, form the executive committee.

After the business meeting Bertrand L. Johnson, '05, of the Geological Survey, gave an interesting lecture on Alaska, where he has been employed for a number of years. The pictures shown were of great interest.

A meeting of the executive committee will be held the latter part of January, at which time plans for the year will be discussed, with a view of creating a real live association in Washington.

## Tributes to Professor Richards

In connection with Professor Robert H. Richards' fiftieth anniversary celebration described in the January TECHNOLOGY REVIEW, several tributes in verse have been received, which we publish below. These came too late to be incorporated in the account of the dinner last month.

R. H. R.

See the conquering Hero comes!  
Joyfully we greet him.  
Young and old from far and near  
Gladly haste to meet him,  
Press his hand, bless his name,  
Find him looking just the same  
As when he and they were boys,  
Sharing study's griefs and joys.

See the conquering Hero comes!  
Not from bloody battle,  
Not where sound the roaring drums,  
Where the fierce shells rattle.  
Joyful warfare, helpful strife,  
These have claimed his goodly life.  
In the fields of peace he led us,  
To the tasks of peace he bred us.

Earth her secrets deep revealed  
Gladly at his seeking;  
Science lent her clearest voice  
When he would be speaking:  
Minerals and metals all  
Rose responsive to his call;  
"Dear Professor! prithce melt us!  
Dress, refine, reduce and smelt us!"

See the conquering Hero comes!  
Truth that never falters,  
Kindliness that neither time,  
Age nor distance alters.  
Hand of strength, heart of gold,  
How should such as he grow old?  
Nay, his smile reveals, in truth,  
Secrets of immortal youth!

See the conquering Hero comes!  
Here we stand to bless him!  
Yet, so modest is his mien,—  
We must not distress him.  
Press his hand, bless his name!  
Know him always as the same,  
Present or removed,  
Still the best beloved!

L. E. R.

To R. H. R. by one of the "Picked up Lot" (with apologies to the Department and Rudyard Kipling.)

A pleasant faced man,  
is Bobs,  
Tackles all the work he can  
does Bobs;  
Remembers everything he hears  
And keeps it up for forty years  
With a smile round both his ears,  
That's Bobs!

A laboratory built for mining  
Which was Bob's,  
Caused derision and repining,  
Didn't it, Bobs?  
It's been copied far and wide  
And pointed to with pride;  
But I'll tell you on the side,  
It was Bob's!

He's getting now a pension,  
Aren't you Bobs?  
Which was but fair to mention,  
Weren't it, Bobs?  
Now he'll have to smile,  
Buy a better looking tile  
And wear it (on one side) for a while,  
Won't you Bobs?

Here's a health to Robert Richards  
After fifty years of thought,  
Planning mills that save the values.  
Oh! he knows an awful lot.  
Now be careful in your dinner  
Lest your glasses be too big.  
He may take a sudden fancy  
He will dance the Richards Jig!  
Frank E. Shepard, '87.

## A NOTABLE BANQUET

One of the largest in the history of the Association—Speeches by Lieut.-Gov. Cushing, President Maclaurin, Ex-President Taft and Howard Elliott

The annual banquet of the Alumni Association, held at the Somerset Saturday evening, January 9, was one of the most successful in the history of the organization. There were about five hundred present, and all the classes of the Institute were represented excepting '69, of which there are but few members.

The speakers of the evening were President Maclaurin of the Institute, ex-President Taft, Lieutenant-Governor Cushing, and Howard Elliott, president of the New York, New Haven & Hartford Railroad. Mr. Taft was the guest of President A. Lawrence Lowell of Harvard University, who also sat at the head table.

During the progress of the dinner James W. Rollins, '78, arose and presented the felicitations of the alumni to Mrs. and Dr. Maclaurin on the newest Tech man on the list, Richard Colin Maclaurin, born December 26, 1914. On behalf of the association he presented to the young man a handsome silver porringer and spoon. He then called the "color guard" of honor from behind the portals, and instantly there appeared a diminutive colored boy dressed in uniform and carrying, with becoming dignity, a cushion upon which rested the gift of the alumni. This called for a long Tech cheer for Mrs. Maclaurin and the baby, and the President provoked a burst of laughter by saying, "Gentlemen, as I came from home tonight I heard him vociferously practicing the Tech yell."

Tech songs were heartily sung during the dinner, and after the "Stein Song" President Whiting arose and reported on the record of the year. He spoke of the important work done by the Alumni Council, referring to the systematizing of relations between the alumni and undergraduate activities, the plan for re-organizing the Technology Coöperative Society, a plan for carrying on greater

Institute publicity in foreign lands, and the plan for closer relations between Technology and the Commonwealth, whereby the laboratories and the teaching staff of the Institute will be available for use by the state. He also referred to the successful launching of the course in engineering administration, a course which was suggested by the Alumni Council and outlined by a committee representing it. He then introduced Lieutenant-Governor Cushing, who spoke as follows:

It seems to be the fashion of the day for the Government to draw on the universities and for the universities to draw on the Government. I need only mention as examples of this tendency the President of the United States and the distinguished Ex-President who sits at this table. Whether or not the Institute of Technology proposes to follow this fashion and intends offering a member of its Faculty as a candidate for the Presidency or contemplates recruiting its Faculty from our ex-presidents I, of course, as an outsider, cannot tell; but I have read with great interest the report of the Committee on Organized Coöperation between the Massachusetts Institute of Technology and the Commonwealth of Massachusetts, and I find that the Institute is prepared at least to place its resources at the disposal of the State Government. The report is full of interesting suggestions and possibilities and it is to be hoped that some working arrangement will be arrived at whereby the state will utilize to the fullest the scientific knowledge which the Institute commands.

I am inclined to think that the greatest defect in our public life in this country is lack of thoroughness. Our expenditures are most generous, but we have developed no policy of keeping our expenses within our income. Our financial methods are most crude. The growth of our institutions and departments has been haphazard; a department or a bureau is added from time to time to undertake a particular work and continues on forever; and no effective attempt at coördination seems possible. This adds of course enormously to the cost of government. We entirely disregard the necessity of any preliminary training or experience in high public office. It is the general impression that any American citizen is able to fill any position provided he can get the votes or the appointment. Our country has been so rich and undeveloped that we have been able to prosper in spite of our defects in administration. But the time has come when taxa-

tion begins to bear heavily, when the resources of the Government are rapidly becoming insufficient to continue the activities it is expected to carry on, and when economy and efficiency become essential. And it is fortunate that the Government may turn to institutions like this and learn the lesson of scientific precision and elimination of waste for, unless this lesson is learned, we shall be overwhelmed by the top-heaviness of our various governments.

In presenting President Maclaurin, Toastmaster Whiting introduced him as a prominent scientist, a leading exponent of the law and economics, as a mining engineer who has proved his worth by digging up "Mr. Smith," as an able administrator, as the creator of the New Technology and a defender of the old Technology, and the greatest distinction of all, as the husband of Mrs. Maclaurin. President Maclaurin's address was as follows:

The year that has passed since your last banquet will be noted in the annals of Technology as pre-eminently a year of coöperation. Coöperation is not a new thing, indeed few things are new, but there was relatively little effective coöperation between educational institutions in the past compared with what we are having now and are sure to have in the near future. Practically all our colleges, universities and the like in Massachusetts and in other parts of the country have been developed in absolute independence of the others. And may I say that it seems to me well that they should have been so developed and that no one can seriously want them now to be reduced to one level or to one type. However, just as with individuals so with institutions, you can have absolute independence and yet a spirit of coöperation. The manifestations of that spirit in college circles have been checked in the past by many forces, not the least effective of these being college pride, particularly the pride of the alumni in their own institution—a useful and splendid thing in itself, but with its accompaniment of evil. Pride in one's institution is in some respects more insidious than pride of self or pride of family. Not infrequently, it urges men to prescribe for their institutions policies that they would not deign to follow for themselves. It gives men a misleading sense of ownership and makes them believe sometimes that their institution exists for them. We must never get away from the fundamental fact that educational institutions exist for the rising generations and not for those that have risen, that their purpose is to serve the community as a whole and not that section particularly on which they have already conferred great favors, and that it is a matter of little importance whether those associated with educational institutions get any glory for their service or not. Neglect of these fundamental things has led to much that is regrettable in the past, but we seem now to see clearly the dawn of a new day. Doubtless, it, too, will have its surprises and its disappointments, but, on the whole,

it should be brighter than those that have preceded it. The year that has passed marks clearly the beginning of this brighter epoch. Just a year ago today a great stride was taken in the right direction by the agreement between Harvard and Technology that has been discussed so much within the last twelve months. It is an agreement honorable to both and advantageous to both. President Lowell has wisely said that we need not discuss which party to the agreement gets the greater advantage so long as the community benefits. This is profoundly true, but none the less is it true, in my judgment, that both institutions greatly gain. The actual working of the agreement has not yet been seen completely for at present it is only in partial operation. However, so far as it has been tested it has worked perfectly smoothly, and not one of the difficulties that loomed so large to the vision of some has presented itself in reality.

As the alumni year began on a note of coöperation, it has ended on one. Three days ago, there was a meeting in Boston of representatives of the leading educational institutions in Massachusetts. Judging from the scant notices, it does not seem that the press, except in a few cases, appreciates the significance and the importance of the movement that was there initiated. At that meeting a permanent association was formed for the purpose of considering ways and means of extending the service of the degree-granting institutions of Massachusetts so as to meet more completely the needs of the Commonwealth. It will be most interesting to see what comes of this coöperative movement *on the grand scale*, for here you have coöperating not two institutions but nearly twenty, with some two thousand professors and instructors, twenty thousand students and many times that number of alumni, and all parties to the coöperative effort are institutions with long years of experience, valuable traditions and great moral influence. Each of these institutions has been devoting its main energy to training within its walls those students, mostly just growing to manhood or womanhood, who are fortunate enough to be able to devote three, four or more years to such training. The University Council of Massachusetts will leave that great work to its individual constituent colleges to perform as each thinks best. Its special function is to organize them all for extramural service, to enable them by coöperative effort to do more than they are now doing for the great section of the community outside the college walls. The work that the association has taken in hand immediately is the organization of extension courses throughout the Commonwealth, the establishment of bureaus of information and the setting up and the making of some arrangement whereby the laboratories of the various institutions can be placed more freely at the service of the state and municipalities and the expert knowledge of the professors utilized in the solution of the countless problems that present themselves in the social life of the community. If this great coöperative effort is at all successful, it means that we have established what is effectively a great university of Massachusetts, worthy of the best traditions of the Commonwealth and incomparably more potent for service of certain kinds than any single institution could possibly be.



There have been many other examples of the working of the coöperative spirit in educational circles presented at Technology during this year. I must not presume upon your patience by discussing these examples, but perhaps you will permit me to enumerate a few—such as the arrangements that are being made for the more effective coöperation between the alumni and the undergraduates of Technology; for the carrying on of the Harvard Coöperative Society for the benefit of Technology students as well as of Harvard students; for more frequent social meetings of Harvard and Tech alumni associations. There has been much pleasant intercourse between the alumni of the two institutions during the year, this movement having been greatly stimulated by the deep impression made upon all, who were fortunate enough to hear it, by the cordial speech of President Lowell at the last meeting of the Technology Clubs Associated in Chicago. I would have you note, gentlemen, that the examples of coöperation that I have quoted are largely due to the activity of your Alumni Association acting through that very live body—the Alumni Council. That Council has had a year of remarkable achievement, reflecting great honor on President Whiting, and setting a very high standard indeed for his successors. The Alumni Council, as I have said, has taken an active part in all the coöperative movements of the year. When the negotiations with Harvard were in progress, the president of the Alumni Association, Mr. Fay, and the president-elect, Mr. Whiting, and other members of the Alumni Council, were consulted, and the suggestions that they made were incorporated in the terms of the agreement. The formation of that agreement gave a great stimulus to the idea of coöperation throughout the country, but naturally its first effect was felt in Boston itself. At the first meeting of the Council after the last annual banquet, President Whiting called attention to the question of coöperation between the Institute and the Commonwealth. A committee was subsequently set up, on which committee the governor was represented, and after investigation, a valuable report was presented. The discussion of that report had an important influence in bringing about the formation of the Massachusetts University Council formed a few days ago by representatives of institutions of higher learning within the Commonwealth. Of that committee, a special committee, of which I am chairman, has been set up to deal with the problems discussed in the report of your Council, and no doubt the committee will be greatly influenced by the specific recommendations made in that report.

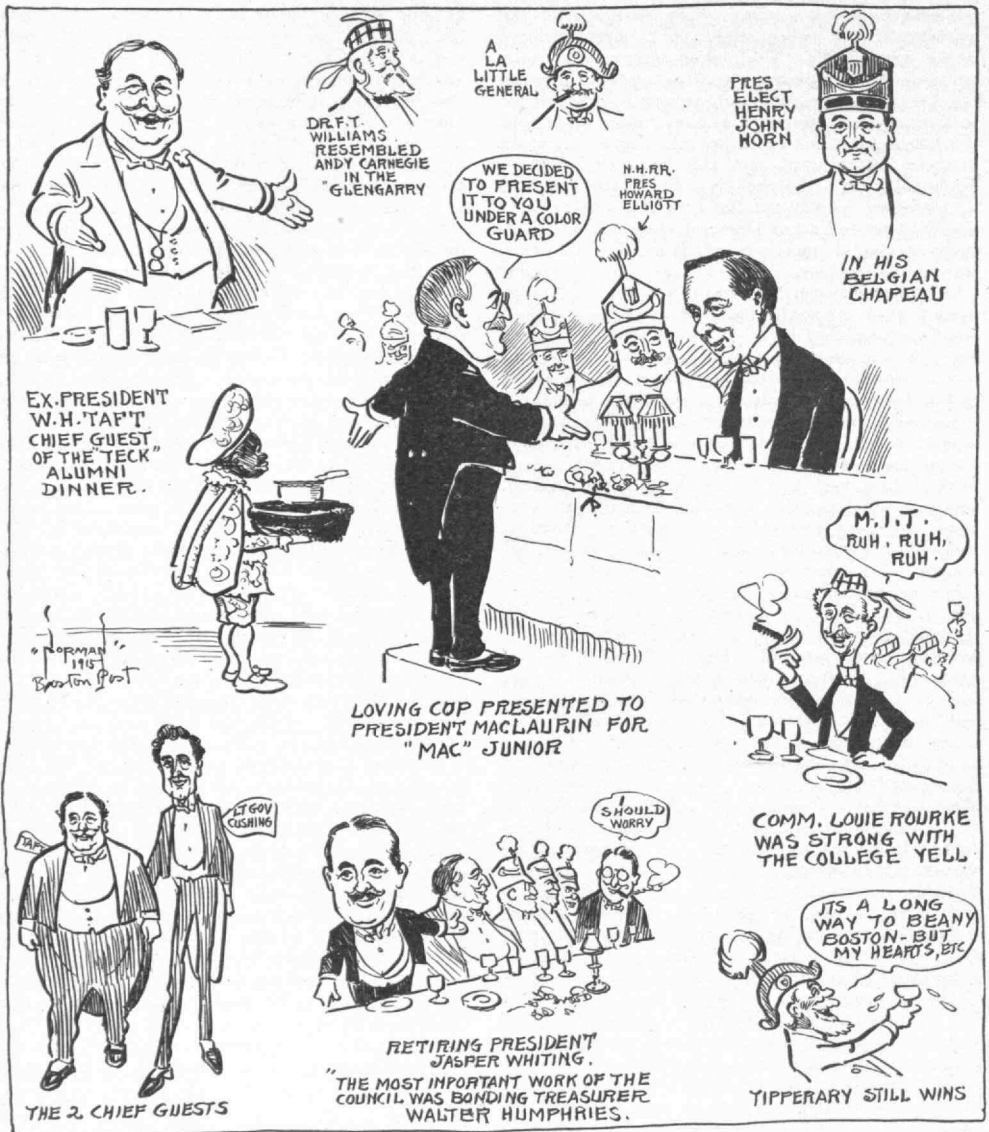
I think that the facts that I have put before you will indicate that great movements are taking place in the domain of education and that Technology is taking its fair share in helping the movements forward. We need not expect too much, for much, unfortunately, is happening in the world today to discourage the idea that we are rapidly approaching the millennium. Fortunately, however, not all movement is retrograde and the growth of the coöperative spirit is one hopeful sign. In spite of this growth, there will doubtless be selfishness and jealousies and antagonisms between institutions

as between individuals in the future as in the past, but none the less we may be justified in the belief that the working of the spirit of coöperation will ultimately prove irresistible. Even the evil of war may help it in some ways, for this war must force the attention of our people to the absolute necessity of conserving all the forces that operate for good and should make it clear that we cannot go on longer wasting our energies and our resources as prodigally as in the past. And it is forcing us also to look ahead and to look abroad. We can no longer be self-centered, self-contained, and self-satisfied. What is true of all the leading institutions of learning today is peculiarly true of Technology. That institution is no longer local in its influence, and its problems are not local problems. It has the whole Union, to a certain degree the whole world for its parish. The speakers tonight, not to mention the official representatives of Technology and its Alumni Association, seem to me to happily indicate the extent and range of Technology's interest. We have the lieutenant-governor, Mr. Cushing, to remind us of our duty to the Commonwealth to which we owe so much, and whose service must always be our first consideration. We have Mr. Elliott, the president of the greatest railroad in New England—a railroad on whose successful operation depends in so large a measure the industrial and commercial prosperity of that great section of the country of which Massachusetts is but a part, and we have Mr. Taft representing the nation as a whole—a man held in respect and affectionate esteem by his countrymen everywhere and by his great qualities of mind and heart typifying what is best in humanity all the world over. If you and I, gentlemen, are to take our fair share in helping Technology adequately to perform its task, we must keep our vision clear and our sympathies broad, no narrow, no local, no provincial outlook will avail, and no merely selfish considerations must be entertained. Technology, of course, must preserve its individuality or it cannot be a power, but it need not, and indeed as I see things, it cannot, stand alone. It will go forward now, strengthened in every way by its alliance with Harvard, and ready at all times to coöperate with all other institutions that make for the enlightenment of the community.

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President Howard Elliott of the New York, New Haven & Hartford Railroad was the next speaker. He said in part:

Our railroads are the most efficient in the world and furnish more and better service and at lower prices than can be obtained in any other country. They are not as good as they should be and can be, but they are owned and managed by human beings who are no better or no worse, as a whole, than the general public they are trying to serve. They have made, and will continue to make, mistakes, just as people do in all other kinds of business, as well as in government. One reason why they are not as good as they ought to be is that legislators, State and National, in trying to correct mistakes which owners and managers have made, have allowed the siphoning of errors to blind them to the dollars of wonderful



work already done and being done every day. They have, in their effort to correct abuses and mistakes which were gradually correcting themselves, created conditions which today make it almost impossible for the owners and managers of railroads to go ahead and do the very things that the public wants them to do and that the owners and managers want to do.

It is a most serious matter for the country that the transportation industry has come so nearly to a standstill in its development because the next time there is a business revival, which is sure to come, the transportation companies may not be ready for it because they have no margin for needed improvements.

The American railroads perform a greater service per mile of line at a cheaper rate and pay higher wages than any other railroads in the world. The Comptroller of the Currency says, in his annual report, that there are 11,000,000 depositors in savings banks with \$5,000,000,000 to their credit. Much of this large sum is invested by the banks in railroad securities so that these 11,000,000 people have a very vital interest in having the railroad industry sound and profitable.

The conservation of this industry is vital to this country, and owners and managers should be helped rather than hindered in their earnest efforts to make it more useful and efficient.

It cannot be denied that some of the difficulties

in which this great industry now flounders are due to errors and misconceptions in the past as to the duty of the public service corporations to those they were trying to serve. There is, however, much of good and high purpose in the management of railroads, and some of the errors and mistakes which are now condemned, were made through lack of experience in what is a relatively new business, considering the life of the country, and in an earnest effort to accomplish results which have added to the comfort and convenience of all the people. It should also be remembered that practices now condemned in business life were considered proper by individuals and the Government itself only a few years ago. These errors in management and the impatience of the public have helped to bring about the great mass of confusing, drastic, conflicting and crippling legislation that we have today; but, if the private owners and managers of these properties went too far in one direction, the regulatory power of the Government and the passion for trying to correct failures incident to humanity by legislation are now going too far in another. I believe the railroad managements of the country realize that they must strive for the highest honesty, the greatest economy, efficiency in managing the properties and recognize the fact that the character of public regulation in the future will depend somewhat upon the attitude of the railroad owners and managers in dealing with the public.

The people, however, should remember that in exercising their great power through their Government to punish the railroads for errors and failures, they may go too far and hurt those who are not responsible in any way for these errors and cripple the very institution that should be well equipped to serve all the people. It should not be forgotten, in considering the extent to which Government control and regulation have gone, that railroad property after all is still private property, and no power can justly require the use of the property without a reasonable reward.

Surely the present method of paying the railroads for transporting mail and parcels post, and the attitude of Congress about it, are absolutely unjust. Since the inauguration of the parcels post and the increase in the weight limit to 50 pounds, the New Haven Company is underpaid at least \$1,000,000 by the Government for service performed and facilities furnished.

The Government and the railroads are now engaged in making a valuation of the railroads. The railroads do not object to that work, although the cost will be very great. But in making that valuation all elements of value must be considered and the railroads should be protected by Constitutional guarantees just as well as all other property is protected. If this is done, the valuation will, in my judgment, in most cases, prove to be more than the capitalization, and the charge of overcapitalization will be refuted.

There are a number of signs that the pendulum of regulation, having swung so far in the direction of drastic and almost strangling legislation, has stopped, and it is most earnestly to be hoped that the damage already suffered by the great transportation interests of the country can be repaired before the next uplift in business.

I am glad to say that the public is realizing that conditions are such that higher rates must be paid, and is showing sympathy with the efforts of the roads to save money and postpone improvements.

They need legislation in the various New England states that will not conflict and that will permit the inauguration and development of some broad financial plan, so that they can give up the present expensive method of borrowing money at high rates of interest for short periods of time. Such legislation will help to restore the credit of the railroads and thus help not only the roads and their security holders but business generally.

They need the influence of thoughtful, careful men upon all in public life to show them that the time has come when the public servant will serve his country and his constituents best who, while stamping out dishonesty and improper practices in both the Government and business, will realize that Government is not for the purpose of crippling and hindering business.

The question of the relation of the Government to the people is perpetual, but if the wonderful educational system of the United States does its work right we ought to do better with the problems in the next twenty-five years than we have in the last. Regulation of the great public service corporations, if it stops progress, is a failure. The power to regulate carries with it the duty to protect. Men like graduates of the Institute and of Harvard ought to use their influence with their representatives and help them, and should not stand aloof.

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Ex-President Taft made a decided hit with the alumni. He evidently enjoyed himself, as he came up smiling after a particularly happy introduction by President Whiting who presented him as "a man who loved his country better than his job." President Taft said:

Mr. Chairman and alumni and alumnae of the Massachusetts School of Technology, I rise with much diffidence. Years ago,—it seems to me as though it were in the 17th century,—I tackled differential calculus and integral calculus, and then a something under Professor Newton that I never understood, analytical mechanics, and those curves that described the movement of heavenly bodies. Now it is as if it never were. To look into the faces of men who live with integral calculus, differential calculus and consume logarithms by the dozen every day, when all I can recall is that  $\pi$  is 3.14159, is to impose on me becoming modesty. When I recollect the reputation of the Institute of Technology,—and how many have fallen by the way in the struggle for a degree,—I know that I am looking into the eyes of the sheep and that the goats are not here. One who comes into such a company may well watch his step.

It was not for my engineering ability—great as that is—that I was invited here and that President Maclaurin and President Lowell and your distinguished chairman asked me to come. They suggested that I come as a neighbor interested in promoting the welfare of the neighborhood. I



knew that I was to come to congratulate you on a wedding. I did not know that I was also expected to act as one of the sponsors at a christening, but I am glad to assume any duty of that sort and to testify that I shall see to it that that young Maclaurin shall pursue the right course in studying algebraic curves and in making himself acquainted with logarithms and integral calculus. I come in a real spirit of felicitation to you of the Massachusetts Institute of Technology upon the great step that you have taken during this last year. I have read the contract which expresses the coöperation effected between the Institute and Harvard. You have a joint department in engineering in all its branches, including mining and metallurgy. You have united the faculties in those courses of Harvard and of Technology. You are making your professors, professors in Harvard as well; and you are making your graduates, graduates of Harvard as well; and you are putting the equipment, the plant and the funds available for this great field of education in both these great institutions into one fund to give the benefit of the prestige of both institutions to those lucky men that shall take those courses, to bring the humanities of the University to the Tech school and the thoroughness of Technology to the University. I can conceive of nothing more useful.

You don't violate, in your combination, the Anti-Trust Act, and the reason why you don't violate it is that you are forming, within the law, a combination that improves the quality and reduces the cost of production. The tone of that agreement is delightful to breathe in—because of the confidence it manifests of each institution in the other, the trust manifested in the language when each agrees that it will do the best it can to follow out the general common purpose. I was carried back, in reading the contract, to a contract not exactly like that, of the dissolution of a Unitarian Church in Cincinnati. They had Orthodox Unitarian out there and radical Unitarians in one church, and they made a contract of division. In a friendly suit they got into the Supreme Court of Ohio, and the Court was so impressed by the equity of the division agreement and the desire of the parties to do justice to each other that the Court went out of its way to say that they had settled many religious differences in court, but that this contract breathed a spirit that was rare to find even in religious contracts. So here this contract discloses nothing of that spirit of competition and that desire of one party to get ahead of the other—which I am sorry to say is not always absent in the relations of great institutions of learning.

You are not, however, the first in adopting this principle of coöperation for the benefit of education. Last year I had the privilege of visiting the University of Toronto, that home of the Orangeman and of the Scotch, where of all places you would least expect a union of educational interests between all the religions in the state; and yet there they have a great secular university; and on the grounds of that university are six theological schools in a circle around the secular "power-house," so to speak,—a Church of England, a Methodist Theological School, a Presbyterian Theological School, a Roman Catholic Theological School—every denomination except the Baptist,—and somebody

has irreverently suggested that this was because "they didn't have a pool in the middle." Thus has been organized a great university life in which the secular education is in the University and that the theologian goes to the theological school according to choice. Two such notable instances of university coöperation as that and this will be useful precedents.

The idea of a university for Massachusetts was thrust on me for the first time tonight. I hope that you will swarm over into Connecticut, too.

One feature of this contract that I have noted with a great deal of interest is the provision that the registered students of the Institute of Technology, in enjoying the privileges of the members of the University of Harvard, are to have only the advantages of the professional schools and not those of the undergraduates. Had that been otherwise so that there was to be added to the number of students from whom were to be selected your representatives in other fields of activity than the intellectual, I think we in Yale would have sought to enjoin this union as an effort at monopoly of athletic victory. President Lowell and President Maclaurin were doubtless well advised in this, but out of abundant caution I wish to give them warning that in this very friendly coöperation that is going on, if that particular clause should be amended or repealed, you may expect to hear something in the nature of a protest from the colony founded by John Davenport.

Your chairman, I find, is a gentleman who, with me and with Legaspe and Magellan, invaded the Philippines centuries ago and that our association began there. What he says in regard to the club in Manila is full of interest. We did have Technology men there and we were glad to have them there. The truth is that the welfare results on that archipelago we have achieved were largely due to the engineering and sanitary work. They justified and vindicated our being there. No one knows the value of engineering work until he comes into a responsible position and has thrust on him the welfare of a people—especially of a people like the Filipinos.

There were forty or fifty thousand men engaged in such a work as that of the Panama Canal. The engineering history of that canal and the crisis through which we went in determining whether that canal should be a success or not has never been fully written. You who are civil engineers perhaps followed it with more attention than the layman. The question as to whether that canal should be a failure or not trembled in the balance on the settlement of the issue as to whether we should make a sea-level canal or a lock canal. We were in favor of a sea-level canal in the beginning, because it is easier to sail on the level than to go up and down steps. We invited European engineers to sit with our engineers and the European engineers, all of them, with one or two of our engineers, constituting a majority, were in favor of a sea-level canal. The vote in the Senate at one time would have been two thirds for the sea-level canal if great effort had not been made to bring about a different result. I think that everyone realizes now, with a sea-level canal, the difficulties which are great enough now

would have been prohibitory and the time taken in the construction would have been so long that everyone would have been tired out—and it is doubtful whether we would have had a canal at all. It is the judgment of the American engineers against the judgment of the European engineers. The former were in the minority, but we sided with them. Noble, the dean of American engineers, who has now gone to his reward, headed the commission. We followed him and reached the right conclusion. When I think of what we escaped,—the loss of American prestige, the waste of money, and the delay in securing the great benefits of the canal,—I feel proud of the clear-headedness of American engineers. It is a delight to acknowledge it before this body.

We have heard the chairman refer to the sins of omission and commission of a previous administration. He dwelt on that with emphasis as though it were a sweet morsel rolled under his tongue. If he enjoys that, how he will enjoy himself when the next administration comes in and he is out. It will be the calm delight the minister has who steps down from the pulpit and listens to the sermons of his successor and points out his many departures from the orthodox theology. I have tasted that real joy.

I listened with a great deal of interest to the full exposition of the difficulties of the railroads by the president of the New York, New Haven & Hartford Railroad—difficulties that are real and that the country is only beginning to appreciate. I must express my agreement with him—that the pendulum has swung too far, but we are beginning to find out that we are all in the same boat, that if we don't do justice to every important class in the community, and if we cut the railroads down so that they sink we shall all go down with them. But I have the utmost confidence in the American people. I know that there are some people who have intimidated that I have not that confidence. President Elliott referred to the last election. There is no doubt that it shows a reaction. We must have, every once in a while, jolts. When we are prosperous, when we are running at a high speed, when everything seems to be going well, we are swelled with the idea that "be it enacted" will accomplish everything—then we get a jolt, and we find that we cannot depart from proper, sound, economic methods; we cannot lift ourselves by our boot straps; man is still made up of human nature, and he will have his defects tomorrow just as he had them last week, and any plan based on the idea that he is a perfect altruist is a plan that, up to date, has failed. And so we go on. We make progress and then we stumble and we injure ourselves by the stumble; it hurts but we learn a great deal, and that is what we are doing now.

First the railroads thought they were the whole thing. They violated the law and they did a lot of things they should not have done, and they thought they could defy the people. They treated the Interstate Commerce Commission early in the life of that commission with contempt. Then the people began to "inch up" on them by amendments. The railroads found that nobody can fight the people successfully where the people have right on their side and win in the end. Ultimately the

people got the necessary momentum and now they have gone beyond the median line. They are regulating too much, and in regulating too much they are hurting themselves. They must retrace their steps somewhat. This is usually the history of progress. We go on and make mistakes; they hurt and we learn a great deal, and then we go on again from the knowledge acquired. I believe with President Elliott that we are going back to better management. The railroads know a great deal more and the people are learning a great deal more.

I congratulate you from the bottom of my heart on the great step in the progress of education by introducing the humanities into the environment of of technical education, and in offering thoroughness of technical education as part of a curriculum of a great university of the arts. You are making a union in which you retain the individuality of each institution, a union of two great influences that welded together must make for the betterment of education in this country and the elevation of the community.

The last speaker of the evening was Henry J. Horn, '88, who expressed his admiration of the work which had been done by the Alumni Association through the Alumni Council, which has inaugurated and carried to a successful conclusion so many important things of direct interest and benefit to the Institute.



### Dinner and Election

CINCINNATI M. I. T. CLUB  
AT MECKLENBURG'S, HIGHLAND AND  
UNIVERSITY AVENUES, MT. AUBURN,  
JANUARY 23, 1915, AT 6 P. M.

Lantern Slides of the new  
Technology Buildings

BOWLING

### The Rochester Experiment

The Technology Club of Rochester, feeling that it would like to be of greater direct service to the Institute, has been casting about for an avenue through which it might work to this end, and after discussing the matter of scholarships, special equipment for the Walker Memorial building and other matters that have been brought to its attention, it has outlined a novel plan which at once will benefit the undergraduates and the Institute, and which is, in our opinion, a new and important feature in education.

Although the Institute catalogue shows that there are but 6.2 students to each instructor, at the same time it is quite difficult for the freshmen, and oftentimes the sophomores, to get into direct touch with instructors when special information is desired on troublesome questions in connection with their studies. There are many simple points, that, if cleared up for a student, would make a difficult matter very easy, and oftentimes lack of a little explanation brings about serious consequences.

The members of the Rochester association, recognizing the importance of starting the freshmen right in their studies, have written a letter to the President suggesting that the Institute arrange for a series of informal conferences every day in the week except Saturday, from one to two o'clock, these conferences being free to all students. They are to be held in a room adjacent to the student Union and the men chosen to act as tutors are to be selected from the instructing force of the first- and second-year classes. The men selected would preferably be young men who would be easy to approach and able to mix easily with the students.

These conferences would be of a most informal character, smoking would be permitted in the room and the simplest questions would be given as much attention as those of a more complex character. There would be nothing of a lecture room atmosphere about the place. The instructor would be of practically the same age as the undergraduates seeking information, and it would be in effect a sort of family affair.

The President and Dean Burton have heartily approved of the proposal, and President Maclaurin has accepted the suggestion on behalf of the Institute, naming Dean Burton as the administrator of the experiment.

A check covering the expenses of carrying out the plan during the second term has been received from the Rochester association, and appointments of instructors have been made for each day of the second term of the year, excepting Saturdays and Sundays. The sessions will be held from one to two, beginning with the new term, and from the enthusiasm with which the members of the Faculty and undergraduates have hailed this innovation, the room is expected to become a very popular place.

If it should fill its purpose, it is likely that other associations may desire to help in the work and have instructors at the Union for a longer time each day.

This venture, besides being of great importance to the Institute will have a direct effect on the association, as its connection with Technology will be most intimate. From time to time the Dean or one of the instructors will write to the Rochester association telling of the progress of the work and some time later in the year a representative of the tutorial group will be invited to Rochester to speak in a general way of the "Rochester Experiment."

### Death of Oliver H. Perry

Oliver Hazard Perry, '74, former treasurer of the Middlesex Company, Lowell, died suddenly in Boston, January 11, of heart failure at the age of 63 years. Mr. Perry was a grandson of the famous commodore of the same name. He was born in Lowell, Mass., in 1851. After leaving the Institute of Technology he became superintendent of the Middlesex Company, where he served as agent and treasurer, retiring after thirty-three years of continuous service.

"On to Pittsburgh, February 19 and 10—the latch string is out."

## ANNUAL MEETING OF THE COUNCIL

Reports read from all committees and new officers installed—Debt of the association reduced one half—Association in fine working condition

There was a large attendance at the annual meeting of the Alumni Council, held at the Engineers Club, Boston, on Monday evening, January 25.

Local associations from a distance were represented by R. H. Howes, '03, from New York; W. D. Coolidge, '96, of Schenectady, and C. F. Lawton, '77, of New Bedford.

During the salad course W. D. Coolidge, '96, of the research laboratory of the General Electric Company at Schenectady, who discovered ductile tungsten and the new important development in X-ray apparatus, was called upon for a few words. Dr. Coolidge spoke of some interesting experiments now going on in the laboratory, by means of which flaws in castings can be discovered by the X-ray. Castings upon which much work is to be done can be inspected in this way, so that it can be definitely known before hand whether or not flaws will be found which would ruin the piece. The X-ray reveals air bubbles in castings that are not over a thirty-second of an inch in diameter. These show up beautifully on the plates. He had just come from Cuba where he has been experimenting with the X-ray for the purpose of killing the cigarette beetle which often does much damage to the tobacco crop. This insect enters the leaf before it is manufactured, and after it is packed in boxes it perforates the cigars, ruining them. It is desired to sterilize the cigars with the X-ray after they are packed.

George B. Glidden, '93, who was also called upon, spoke of the lack of good Technology songs, and hoped that in the future at least one song would be sung at each meeting of the Alumni Council.

At the business meeting, after the dinner, the secretary made report of the last meeting of the Council and read a letter from Mrs. Maclaurin, thanking the association for the porringer and spoon pre-

sented to little Richard Colin Maclaurin on the occasion of the banquet. The secretary's annual report was then read, followed by that of the auditing committee.

Field Manager Litchfield, '85, reported that there were practically forty-two local associations and that six new associations had been formed during the year. Arrangements are being made to hold a meeting of the Pacific Technology Clubs Associated at San Francisco during the Panama-Pacific Exposition. Mr. Litchfield also spoke of a student exhibit, which will have principally to do with the undergraduate organization, showing the relations of the various activities to the student body through the Institute Committee, and the activities of the various departments. This will be sent to Pittsburgh for the reunion. The most interesting new development among local associations was the "Rochester Experiment," which is described elsewhere in the TECHNOLOGY REVIEW. The Rochester club has suggested that a competent instructor be at the Union every noon from one to two to give information in regard to studies to freshmen and others. The Rochester club has sent a check to finance this work, and the President of the Institute had endorsed and accepted the plan which Dean Burton is to administer. At the conclusion of the report A. F. Bemis, '93, moved that the President and secretary be authorized to send congratulations to the Rochester association on behalf of the Council, for the fine spirit shown and the excellent enterprise undertaken.

George B. Glidden, '93, made a report for the Committee on Assemblies, and M. L. Emerson, '04, for the Committee on the Collection of Dues and Increase of Membership. J. P. Munroe, '82, made a report for the Committee on Permanent Funds.



Walter B. Snow, '82, as chairman of the Committee on the Publication of the *TECHNOLOGY REVIEW*, reported that the amount of new advertising obtained during the year amounted to \$851, figured upon an annual basis. Business depression and other causes were responsible for the withdrawal of much advertising, but fortunately much less than the new accounts secured. Advertising for the year 1914 amounted to \$2,455.88.

Carl Gram, '09, made a report for the Committee on Athletics, Clarence W. Brett, '13, reported as adviser of the Undergraduate Finance Committee, and Professor George E. Russell, '00, reported as adviser of the Musical Clubs. In his report he showed that the clubs were in an excellent condition financially and otherwise, and that they were about to make a trip including six or eight cities. In most of the cities where there were local Tech associations, elaborate arrangements have been made for their reception, but owing to some misunderstanding the Philadelphia club was unable to give its assistance. As the itinerary cannot now be changed the clubs are making arrangements to advertise the performance as best it can.

Alexander Macomber, '07, reported for the advisers of the Tech Show, stating that they had hired a coach at much less expense than formerly, and that improvements had been made in the business department. He thought that the returns from the Tech Show would be very much larger than heretofore.

Everett Morss, '85, as chairman of the Alumni Fund Committee, made a report which was read, showing that there were 2,643 subscribers; and allowing for losses by death and otherwise, the amount subscribed was \$500,465.88. There has been \$290,434.11 paid in, leaving a balance to be paid of a little over \$210,000.

J. P. Munroe, '82, made a report of progress for the Committee on Dormitories.

A report from Professor Richards on the Runkle Memorial was read, in which he stated that he intended to proceed at once in asking for one-dollar subscriptions from alumni for the purpose of

securing a portrait of President Runkle to be presented to the Institute.

Professor Tyler, as chairman of the Walker Memorial Fund reported that this fund now amounted to \$149,388.28.

On account of the absence of all of the members on Publicity, President Whiting stated that Paul G. L. Hilken, '03, who has just started on the *Kroonland* on a tour around South America, stopping at the principal ports, had been commissioned by President Maclaurin to stir up interest in Technology wherever he went. He has an exhibit from the Institute, and is also equipped with circulars giving interesting information about Technology, in the Spanish language.

Mr. Whiting gave notice of the annual dinner of the Technology Club of New York, on Saturday night, January 30. He said that he had been impressed with the cordial spirit shown by Harvard alumni in inviting Technology representatives to the Harvard Club of Boston last spring and further by the hospitality of the engineering alumni of the Harvard Club of New York, who invited the officers and about thirty members of the Technology Club of New York to their annual dinner on January 16. Among the speakers on that occasion, were President Maclaurin and Jasper Whiting, '89. Mr. Whiting stated that at the alumni dinner President Maclaurin called attention to the coöperative efforts of the alumni with the undergraduates, with the Harvard Coöperative Association, with the Harvard alumni and with the state. All this work was in the nature of suggesting coöperation to others. He said that we had practiced it ourselves, as a hundred and seventy different alumni had been at work in Boston on matters connected with the Alumni Council.

The new president, Henry J. Horn, '88, was then introduced, and was given three rousing cheers. Mr. Horn said that he was looking forward with a great deal of pleasure to his new relations, and stated that, as a western man, he felt that the association ought to do all it could for the local alumni associations. He spoke especially of the coming meeting of the

Technology Clubs Associated in Pittsburgh February, 19-20, and hoped that other members of the Council would do what they could to make that event a great success. He also thought that speakers from Boston should be supplied for the various alumni dinners held throughout the country, and that the field manager should have an appropriation large enough to warrant extending his work very materially.

While these speeches were being made, balloting had been going on for the new nominating committee. The tellers reported that C. T. Main, '76, Jasper Whiting, '89, and Carl Gram, '09, had received the highest number of votes, and were declared elected members of the nominating committee for three years.

Professor W. K. Lewis, '05, and Matthew C. Brush, '01, were then introduced and made brief speeches. Mr. Brush at the close of his remarks spoke in high appreciation of the success of Mr. Whiting's administration, and called for three long cheers for the retiring president, which were heartily given.

Walter Kilham, '89, the new vice-president of the association, was then introduced and made a short speech.

The annual report of the secretary, including the financial report with some of the reports of committees, will be published as usual in the April number of the TECHNOLOGY REVIEW. It is gratifying to state that the debt of about \$1,200 carried over from last year has been reduced about one-half, without curtailing the activities of the association, a result wholly due to the generous action of the sustaining members.

### Good Meeting in Schenectady

On December 16, 1914, the members of the Technology Club of Albany and Schenectady met at the Mohawk Golf Club in the latter place for an informal dinner.

After the food was properly washed down, Dr. W. D. Coolidge, '96, gave a most interesting talk on X-rays. Informal talks on various subjects were then given by John D. Moore, '95, and G. A. Ricker, '85.

Alex Rice McKim, '85, suggested that the club coöperate with the educational authorities in the two cities by detailing several of its members to give popular lectures on engineering subjects. The members present approved of the project and the president was directed to appoint a committee to have full power to make such arrangements as seemed wise.

President Theodore Horton, '94, presided and introduced the speakers.

Present: Moore, '95, Horton, '94, Sargent, McKim, '85, True, '05, Chase, '06, Suter, '00, Whitney, '90, Coolidge, '96, Lougee, Robinson, '01, Davis, '93, Hobart, '89, Ricker, '85, Arsen, '01, Mackay, '08, Hawkins, '99, Mac Master, '00, Morash, '12, Dexter, Crosby, '03, Pauly, '96, Schwartz, '05, Clark, '86.

This club has no regular membership and no dues. All Tech men within reach of Albany are urged to send their names to the secretary and to attend the meetings. The next dinner will be held in Albany.

### In Memoriam

Each year on the anniversary of the death of General Francis A. Walker, January 5, and on the anniversary of the birth of President William Barton Rogers, January 9, the Walker Club of the Institute decorates the bust of Walker and the Rogers tablet in the corridor of the Rogers building, with a large wreath. This is one of the activities of the club which it has carried on for a number of years. One of the principal objects of the club is to keep alive the memories of both these well-beloved past presidents of the Institute.

### Death of Alonzo S. Locke

Alonzo S. Locke, '77, died at Waltham, Mass., December 27, last, after a prolonged illness. He was born in Waltham in 1847, and after leaving the Institute of Technology, he was employed by the Waltham Gas Company, afterwards entering the employ of the American Watch Company, where he continued until failing health compelled him to give up business.

## HARVARD AND TECH AT NEW BEDFORD

Combination dinner brings out a good attendance—Addresses by President Maclaurin and Professor Hughes of Harvard

The Harvard-Technology dinner, given under the joint auspices of the Harvard and Technology clubs of New Bedford, was distinguished by the presence of Richard Cockburn Maclaurin, president of the Massachusetts Institute of Technology, and Hector James Hughes, professor of engineering at Harvard University, as principal speakers, and provided recreative enjoyment for about seventy club members.

The dining room was neatly decorated with Harvard and Technology flags while at each plate was a puzzle, the creation of Charles F. Wing, Jr., of New Bedford, which drew attention to the fact that this was the first dinner held jointly by the two clubs, since the agreement for coöperation between the two institutions.

Both clubs cheered voluminously whenever opportunity presented itself, which was often. J. E. Norton Shaw acted as cheer leader for Harvard, and Richard D. Chase acted in like capacity for Tech. Dr. John T. Bullard was toastmaster.

Tech and Harvard cheers greeted President Maclaurin, as he was introduced as the first speaker of the evening.

"I am here for a special purpose," began President Maclaurin, "that of congratulating you upon the bringing together of these two institutions, as indicated in the puzzles which are before us.

"I am proud to be able to speak to you as an honorary graduate of Harvard as well as in my capacity as President of Tech. I have an admiration second to none for the good old M. I. T. In the years of my association with it I have an increasing regard for the type of student that it attracts, an increasing respect for the devotion of its faculty and an increasing confidence in the ability of its alumni to serve society honorably and well.

"I say that it is a good thing that both

institutions should have been brought together. Their coming together is due, not merely to these institutions, it is part of a movement that is going on all over the world—the educational movement towards coöperation. We all know that colleges have been developed on an individualistic basis. It has been necessary that they should have been so developed, but new times demand new manners not only between men but between institutions. Happily a different attitude among educational institutions marks this present day. The spirit of coöperation was spreading anyway, but its spread has been hastened by the war.

"If this war has done anything good, it has brought home to the consciousness of the world, the terrible power of the forces of evil which exist in human nature, bringing about such awful waste that we must conserve those powers that make for good. One of the powers that make for good is education, which must be conserved at all costs.

"Now it is true that Harvard and Technology are each powerful enough to go on their own course irrespective of the other. No one suspects that this alliance has been brought about by weakness. It has been brought about by the consciousness of strength.

"Look at the facts. Here are two institutions, which in the field of engineering, have had an extended experience. They could have gone on independently and this course might have been justified, if it had been practicable to keep along on independent lines. But as time has gone on, the two institutions have inevitably been coming together.

"No one has been able to suggest any serious difference in ideas between the institutions. Each has the same type of students, the same kind of professors and it is not practicable to keep them

apart in their methods. Inevitably they must be tackling the same problems by the same methods and with the same machinery. The fundamental reason for bringing them together is that it would be a needless and stupid waste to keep them apart.

"Technology was forced by circumstances to seek a new location. There was no room on its present land to expand. A few years ago, Tech bought a tract of land along the Charles River, upon which is being erected buildings and equipment costing about five millions of money. Harvard, very wisely, instead of duplicating that plant, decides to use it for its own purposes.

"After all, it is the human material that is most important. The two institutions, therefore, agreed not only to coalesce the physical, but to bring the human equipment together. On the financial side, each institution retains absolute control of its resources, but the combination saves so much duplication that financially both are greatly strengthened.

"Now as to the gain. Harvard has the advantage of allying itself with an institution which has, in a pronounced way, the good will of the world in engineering. It gets all the students of high quality that it wants and gets them from all parts of the world. There are in Tech today more than eighteen hundred students, a large percentage of whom come from outside Massachusetts, representing every state in the union, while there are representatives from forty foreign lands.

"Technology gains the association with a great university, which in many respects is unequalled in this country if not in the world. This association should strengthen it and liberalize it, give to its students a wider outlook on life and a broader conception of the function of the Engineer in modern society.

"Does either side lose anything by the association? I fail to see that it does, except perhaps one thing, the sense of exclusive ownership. The world at

large is not interested in views of exclusive ownership. It remembers that such institutions don't exist for glory. They exist for the training of young men.

I see no reason whatever, if this school is guided by reasonable care why it cannot become the greatest school of its kind in the world. Preëminently it is a school of applied science. I don't think it at all improbable that in another generation the schools of applied science will be more important than any other in the world. To build up the greatest of its kind is worthy of the best endeavor of Harvard men and of Tech men. In future the only rivalry between these men should be a rivalry of service for the attainment of a great end.

Professor Hughes's address was devoted to the same subject. The concentration of all the resources of both institutions, he said, would safeguard the integrity of both colleges. If everybody concerned tackles the problem with good will and mutual consideration, they would realize all the benefits.

Professor Hughes talked at length on the details of the coöperative plan. He reviewed the history of the scientific schools at Harvard, from the time of the Abbott Lawrence School, founded in 1847 to the present.

The professor described the changed conditions of engineering and felt that the association of Harvard and Technology would solve the new problems. This country has passed from the pioneer stage. The real problem is to fit men to the demand; to train men for the work they will be called upon to do.

There was a large and increasing demand for specialization. The study of the future will be by concentrative effort to secure coördination between secondary schools and colleges. The proposed coöperative plan is large in its conception. He believed it would be carried out in a big way. He hoped that none would do anything to stand in the way of coöperation attaining its full possibility."  
—*New Bedford Standard*.



### Medal for Dr. Richards

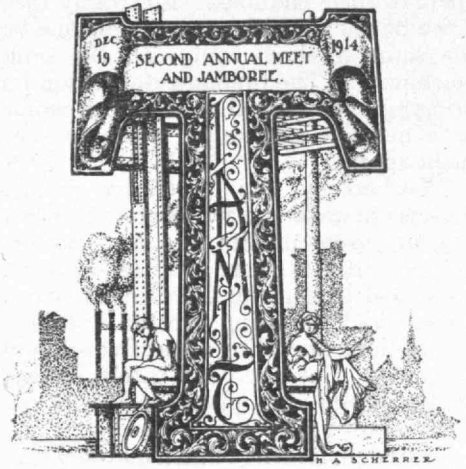
Announcement has been made that Professor Emeritus Robert H. Richards is to be the recipient of the gold medal of the Mining and Metallurgical Society of America. Its award is accompanied by a testimonial in recognition of the services of the veteran teacher in the advancement of the art of ore-dressing. The presentation will be the feature of a meeting of the society about the middle of March, the date of which will be noted later.

The award, which is the highest honor in its class, is determined by nominations made by all members of the society, the council selecting by vote from among those nominated. For this award there were but two names suggested by the regular vote of the society. The presentation is to be made by Walter R. Ingalls, M. I. T., '86, who is editor of the *Engineering and Mining Journal* of New York.

Dr. Richards has principally been known as a teacher and an investigator. Hardly less important than his work along this line are his inventions, which have been of great value to the mining interests of the world. The feature that overtops all else is his development of ore-dressing in which he is considered the greatest living expert, and it is along these lines that his inventive faculties have been chiefly directed.

### Good Spirit in Indianapolis

The meeting of the Indiana Association, M. I. T., held December 19, was the most successful affair of the kind ever held by that organization. The association was organized only about a year ago and has been "going strong" ever since. One of the largest delegations from the local associations at the Chicago reunion a year ago came from Indiana, and this body expects to send a very much larger one to Pittsburgh this month. A reproduction of the guest card at the recent dinner is shown on this page.



UNIVERSITY CLUB INDIANAPOLIS IND.

### MENU

- Nobody home but the *COCKTAIL*—  
and it's drunk.

---

- Nobody home but the *SOUP*—  
and it's canned.

---

- Nobody home but the *OLIVES*—  
and they're always round.

---

- Nobody home but the *FISH*—  
and it got the hook.

---

- Nobody home but the *MEAT*—  
and it went to the fire.

---

- Nobody home but the *ICE CREAM*—  
and that's running away.

---

- Nobody home but the *COFFEE*—  
and that's in its cups.

---

- Nobody home but the *CIGARS*—  
and they're going out.

---

- Nobody home but *US*—  
and we're all in.

## Carrying the Gospel to South America

The steamer *Kroonland*, which is the largest steamer carrying the American flag ever scheduled to sail in South American waters, left New York January 21, carrying Paul G. L. Hilken, '03, representing the Gates Tours, for an eighty-two days' cruise around South America. Mr. Hilken has received a special commission from President Maclaurin of the Institute to stir up interest in Technology wherever he may find opportunity at the various ports where the vessel will touch. One of the passengers on this tour is Roger W. Babson, '98, who will assist Mr. Hilken in presenting the interesting features of the Institute education to important officials along the route.

The *Kroonland* was to touch Havana January 25, and as the Tech men there were notified, it is likely that a reception was tendered to Messrs. Hilken and Babson. It is also likely that another Tech meeting will be held at Santiago, Chile, where there are a number of Institute men within easy reach of that city. Arrangements are being made for meetings on the east coast when the vessel shall arrive there.

## What Sustaining Members Have Done

At the annual meeting of the Alumni Association, announcement was made that the debt, which amounted to \$1,200 last year and which had been accumulating for the last four or five years, has been reduced about one half and in spite of the fact that the activities of the Alumni Association have not been curtailed in any degree.

This satisfactory showing is due to the subscriptions of sustained members; for without their help the expenditures would have had to be reduced to a point where the usefulness of the association would have been much crippled. Notwithstanding unfavorable conditions the subscriptions of sustaining members are coming in this year even more liberally than before, and with this help the alumni organization has most favorable prospects.

## Annual Banquet in Georgia

The Atlanta section of the M. I. T. Alumni Association held its annual banquet January 23, at Hotel Winecoff, Atlanta. The officers of last year, L. M. Thacher, '86, president, and H. M. Keys, '99, secretary, were reelected.

During the past year the club has had a mid-summer outing at Tallulah Falls, where is located the water-power plant of the Georgia Railway and Power Company, and several suppers and 'possum hunts at Bull Sluice, another water power plant of the company.

At the dinner W. R. Collier, '00, was called upon, and thereupon he proceeded to impersonate each individual member, making characteristic speeches for the various members, to say nothing of poems and songs. His contribution was extremely amusing and has gone down as a classic in the club.

## A Word on the Rand Memorial

At the dinner of the Technology Club of New York, January 30, Harold V. Coes, '06, of New Haven, Conn., a member of the fund committee, made the announcement that on account of the unusual conditions, subscriptions had been about one-quarter of what had been anticipated, and knowing that there are hosts of Mr. Rand's friends who would like to be represented, under the circumstances he thought that the exact status of the fund should be presented. There was a demand that a collection be taken and \$100 was added to the fund.

Some of the readers of this paragraph, who knew and loved Mr. Rand, may feel like adding to the fund. Please address: Herbert Fryer, 35 Federal street, Boston, Mass.

## Death of Alfred Heinrich Kudlich, '04

Alfred Heinrich Kudlich, '04, superintendent of the Leighton (Pa.) Electric Company, died suddenly, December 22, following an attack of heart trouble. The attack came while he was visiting his father at Hazleton, Pa.

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